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June 22, 2007

## REPLY BRIEF

Sir:

In response to the Examiner's Answer mailed May 16, 2007, please reconsider the above-identified application in view of the following comments:

Remarks/Arguments begin on page 2 of this paper.

#### **CERTIFICATE OF ELECTRONIC TRANSMISSION**

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Patricia A. Heim

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Thomas M. Lundin, Reg. No. 48,979

Application No. 10/509,644 Reply Brief: June 22, 2007

Reply to Examiner's Answer Dated: May 16, 2007

#### REMARKS/ARGUMENTS

In the Examiner's Answer, the Office asserts that the view lines shown in Figure 6 of Kaji are equivalent to the essentially parallel view lines in the claims. However, as set forth in previous replies to the Office for the subject application the description of Figure 6 teaches away from using parallel view lines when generating images of objects in close proximity and Shimizu teaches a method of constructing an image of an object in close proximity – a three-dimensional image representative of the inside of a organ observed with an endoscope. Both Kaji and Shimizu teach using non-parallel view lines for images of objects in close proximity. Since these references teach away from using parallel view lines for images of objects in close proximity, Kaji and Shimizu teach away from modifying Shimizu to use parallel view lines for images of objects in close proximity, and the purported combination is improper. MPEP §2145 (X) (D) *citing In re Grasselli*, 713 F.2d 731, (Fed. Cir. 1983) (stating that it is improper to combine references where the references teach away from their combination). Hence, it would not have been obvious to one of ordinary skill in the relevant art at the time of the invention to modify Shimizu in view of Kaji to use parallel view lines as recited in the claims.

The Office further asserts that claims 1 and 13 of the subject application do not recite any subject matter related to the proximity or distance of the user from the object and, therefore, proximity would not have impeded or prevented one of ordinary skill in the art from modifying the view directions of left and right eye images. However, claims 1 and 13 are directed towards visualizing an internal hollow organ of a subject based on a volumetric scan thereof and recite reconstructing a number of three-dimensional images of the internal surface of the hollow organ. Hence, claims 1 and 13 both recite aspects related to proximity or the distance to the object as the images are of the internal surface of an internal hollow organ. As indicated in the specification, non-limiting examples of suitable internal hollow organs include a blood vessel and the colon (virtual endoscopy). Such internal surfaces as well as the internal surfaces of other internal hollow organs are relatively small surfaces that would be viewed at close proximity.

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Moreover, since Shimizu teaches a method of constructing an image of an object in close proximity and proximity has an affect on the image, one of ordinary skill in the art at the time of the invention would have considered proximity when modifying Shimizu in view of Kaji. To establish *prima facie* obviousness there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. MPEP §2143. Shimizu and Kaji teach away from the purported combination, and the teaching or suggestion to make the claimed combination must be found in the prior art, not in applicant's disclosure. MPEP §2143.03 *citing In re Vaeck*, 947 F.2d 488, (Fed. Cir. 1991).

The Office further asserts that claim 2, which recites that one of the first and second view points lies on the view path, does not limit the method from having more than one view point on the line and Shimizu teaches more than one view point on a view path. Applicant disagrees and submits that claim 2 explicitly limits the number of view points that lie on the view path to "one of." Thus, either the first view point or the second view point lies on the view path. Applicant also refers the Office to the Amendment responsive to the Office Action mailed on April 4, 2006 in which claim 2 was amended to remove the phrase "at least the first or the second" and to include "one of the first and the second" in order to change the scope of claim 2 from one or more ("at least one") view point lying on the view path to just one ("one of") view point lying on the view path. Claim 3 is directed towards an embodiment in which more than one view point is on the view path.

In view of the above, reversal of the rejection to claims 1 and 13, and claims 2-6, 8-12 and 14-20, which depend therefrom, is respectfully requested.

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# Conclusion

In view of the foregoing, it is submitted that claims 1-6 and 8-20 distinguish patentably and non-obviously over the prior art of record. An early indication of allowability is earnestly solicited.

Respectfully submitted,

DRIGGS, HOGG & FRY CO., L.P.A.

Anthony M. Del Zoppo, III Reg. No. 51,606

Driggs, Hogg & Fry Co., L.P.A.

38500 Chardon Road

Willoughby Hills, Ohio 44094

Phone: 1.440.391.5100 Fax: 1.440.391.5101

Direct all correspondence to:

Thomas M. Lundin, Registration No. 48,979 Philips Intellectual Property & Standards 595 Miner Road Cleveland, Ohio 44143

Phone: 440,483,4281 Fax: 440,483,2452

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